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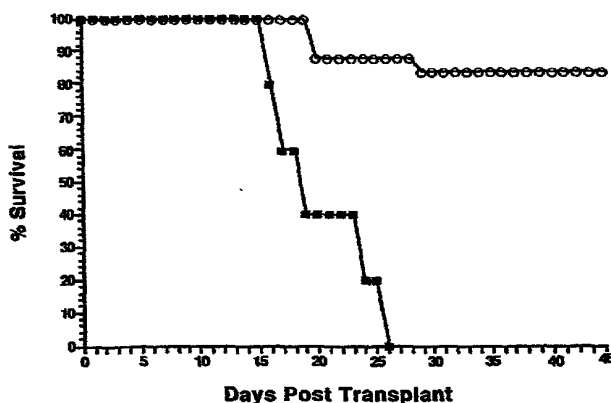
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(54) Title: METHOD FOR ENHANCING HEMATOPOIESIS



(57) Abstract: A method is provided for enhancing hematopoiesis. The method includes transplanting at least a therapeutically effective portion of an isolated vascular tissue into a subject, wherein the vascular tissue enhances hematopoiesis. A method is also provided for detecting an agent that affects hematopoiesis. The method includes transplanting a portion of an isolated vascular tissue into a subject, wherein the portion of the isolated vascular tissue is sufficient to enhance hematopoiesis. The vascular tissue is treated with an agent, and hematopoiesis is detected in the subject. Hematopoiesis in the subject is compared with hematopoiesis in a control. A change in hematopoiesis in the subject as compared to the control indicates that the agent affects hematopoiesis. A method is provided for isolating a hematopoiesis growth factor using the method of the invention. In addition, a method is provided for isolating a hematopoietic stem cell using the method of the invention. Pharmaceutical compositions and kits for promoting hematopoiesis are also disclosed. In addition, a non-human animal model is also disclosed for testing agents that affect hematopoiesis. The model system is a non-human animal deficient for hematopoiesis transplanted with an isolated portion of a vascular tissue, wherein the portion of the vascular tissue is sufficient to promote hematopoiesis.

WO 00/78930 A1